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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,199	09/01/2006	John Brownlie	ERP02.001APC1	6472

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EXAMINER
ARCHIE, NINA

ART UNIT	PAPER NUMBER
1645	

NOTIFICATION DATE	DELIVERY MODE
10/09/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/563,199	BROWNLIE ET AL.	
	Examiner	Art Unit	
	Nina A. Archie	1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,8-19,40-42 and 57-63* is/are pending in the application.

4a) Of the above claim(s) *16-19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 8-15, 40-42, and 57-63* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/9/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office is responsive to Applicant's amendment and response filed 6-9-09. Claims 1, 8-15, 40-42, and 57-63 have been amended and under examination. Claims 1, 8-19, 40-42, and 57-63 are currently pending. Claims 27-39 and 43-56 have been cancelled. Claims 16-19 are withdrawn from consideration.

Declaration

2. The declaration under 37 CFR 1.132 filed 6/9/2009 and signed by Dr. John Brownlie has been considered.

Information Disclosure Statement

3. The information disclosure statement filed on 6/9/2009 has been considered. An initialed copy is enclosed.

Rejections Withdrawn

4. In view of the Applicant's amendments and remarks the following rejections are withdrawn.

a) Rejection to claims 1, 8-15, 40-42, and 57-63 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement is withdrawn in light of applicant's amendment thereto.

b) Rejection to claims 58 and 60-63 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement is withdrawn in light ofapplicant's amendment thereto.

New Grounds of Objections

Claim Objections

5. Claims 58 and 60-63 are objected to as being dependent upon a rejected base claim.

New Grounds of Rejection

35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The instant claims are drawn to an immunogenic composition comprising an agent capable of raising an immune response against *Mycoplasma cynos (M. cynos)* in a dog, wherein said agent comprises inactivated or attenuated *M. cynos* (claim 1), further comprising an agent capable of raising an immune response against *Streptococcus equi sub species zooepidemicus (S. zooepidemicus)* in a dog (claim 57), further comprising an agent capable of raising an immune response against a *Chlamydophila* in a dog (claim 59), further comprising any one or more of: an agent capable of raising an immune response in a dog against canine respiratory coronavirus (CRCV); an agent capable of raising an immune response in a dog against canine parainfluenzavirus (CPIV); an agent capable of raising an immune response in a dog against canine adenovirus type 2 (CAV-2); an agent capable of raising an immune response in a dog against canine herpesvirus (CHV); and an agent capable of raising an immune response in a dog against *Bordetella bronchiseptica (B. bronchiseptica)* (claim 9), wherein the agent capable of raising an immune response in a dog against CRCV comprises inactivated or attenuated CRCV (claim 10), wherein the agent capable of raising an immune response in a dog against CRCV comprises a Spike protein or a hemagglutinin-esterase (HE) protein of CRCV, or an immunogenic portion of the Spike or HE protein (claim 11), wherein the agent capable of raising an immune response in a dog against CPIV comprises inactivated or attenuated CPIV (claim 12), wherein the agent capable of raising an immune response in a dog against CAV-2 comprises inactivated or attenuated CAV-2 (claim 13), wherein the agent capable of raising an immune response in a dog against CHV comprises inactivated or attenuated CHV (claim 14), wherein the agent capable of raising an immune response in a dog against *B. bronchiseptica* comprises

inactivated or attenuated *B. bronchiseptica* (claim 15); a pharmaceutical composition comprising an immunogenic composition and a pharmaceutically acceptable carrier, diluent or adjuvant (claim 8); an immunogenic composition comprising: (b) an agent capable of raising an immune response against M. cynos in a dog; and (d) an agent capable of raising an immune response against CRCV in a dog (claim 40), further comprising any one or more of: (c) an agent capable of raising an immune response against a *Chlamydophila* in a dog; (e) an agent capable of raising an immune response in a dog against CPIV; (f) an agent capable of raising an immune response in a dog against CAV-2; (g) an agent capable of raising an immune response against CHV in a dog; and (h) an agent capable of raising an immune response in a dog against *B. bronchiseptica* (claim 41), further comprising: (a) an agent capable of raising an immune response against *S. zooepidemicus* in a dog (claim 42).

6. Claims 1, 8, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackenzie et al EP 0415794A1 and Hymas et al US Application No. 20020150593 US Publication Date October 17, 2002.

Mackenzie et al teach an immunogenic composition comprising whole cells from *M. cynos* (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55) further and a pharmaceutically acceptable carrier or adjuvant administered to animals such as a dog (see abstract, pg. 2 lines 34-54, pg. 3 lines 15-17, pg. 4 last paragraph). Mackenzie et al teach an immunogenic composition comprising *Chlamydia psittaci which is also defined as Chlamydophila psittaci* as evidenced by Saunders Comprehensive Veterinary Dictionary, 3 ed. 2007 (see attachment of definition) (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55, pg. 4 lines 1-20, and pg. 10 "Vaccines) administered to animals such as a dog.

Mackenzie et al does not teach an immunogenic composition, wherein the agent comprises inactivated or attenuated *M. cynos*, further comprising an agent capable of raising an immune response against a *Chlamydophila* in a dog.

Hymas et al teach an immunogenic composition comprising whole cell, inactivated bacterin from *Mycoplasma specie* (see 0012) (see 0028, column 5, 0045, 0011). Hymas et al teach vaccines used to provide immunity against viral or bacterial infections comprise attenuated organisms or inactivated whole organisms in order to present antigens to the recipient's immune

system sufficient to produce a protective immune response without giving the recipient the disease (see 0008).

It would have been prima facie obvious at the time the invention was made to inactivate y the whole cell Mycoplasma compositions of Mackenzie et al. in the manner taught by Hymas et al in order to take advantage of the increased safety associated with the use of an inactivated pathogen.

7. Claims 1, 8-9, 11, 40-41, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackenzie et al EP 0415794A1, Hymas et al US Application No. 20020150593 US Publication Date October 17, 2002 and Brown et al US Patent No. 5,661,006 Date August 26, 1997.

Mackenzie et al teach an immunogenic composition comprising whole cells from *M. cynos* (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55) further and a pharmaceutically acceptable carrier or adjuvant administered to animals such as a dog (see abstract, pg. 2 lines 34-54, pg. 3 lines 15-17, pg. 4 last paragraph). Mackenzie et al teach an immunogenic composition comprising *Chlamydia psittaci which is also defined as Chlamydophila psittaci* as evidenced by Saunders Comprehensive Veterinary Dictionary, 3 ed. 2007 (see attachment of definition) (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55, pg. 4 lines 1-20, and pg. 10 "Vaccines) administered to animals such as a dog.

Mackenzie et al does not teach an immunogenic composition, wherein the agent comprises inactivated or attenuated *M. cynos*, further comprising any one or more of: an agent capable of raising an immune response in a dog against canine parainfluenzavirus (CPIV); an agent capable of raising an immune response in a dog against canine adenovirus type 2 (CAV-2); and an agent capable of raising an immune response in a dog against *B. bronchiseptica*, wherein the agent capable of raising an immune response in a dog against CRCV comprises a Spike protein or a hemagglutinin-esterase (HE) protein of CRCV, or an immunogenic portion of the Spike or HE protein. Furthermore Mackenzie et al does not teach an immunogenic composition comprising: (b) an agent capable of raising an immune response against *M. cynos* in a dog; and (d) an agent capable of raising an immune response against CRCV in a dog, further comprising an agent capable of raising an immune response against a *Chlamydophila* in a dog.

Hymas et al teach an immunogenic composition comprising whole cell, inactivated bacterin from *Mycoplasma specie* (see 0012) (see 0028, column 5 0045, 0011). Hymas et al teach vaccines used to provide immunity against viral or bacterial infections comprise attenuated organisms or inactivated whole organisms in order to present antigens to the recipient's immune system sufficient to produce a protective immune response without giving the recipient the disease (see 0008).

Brown et al teach a canine coronavirus which causes respiratory diseases in dogs and respiratory symptoms of the canine coronavirus include nasal and ocular discharge (see column 1) which necessarily teaches canine respiratory coronavirus (CRCV) as evidence to the contrary. Brown et al teach an immunogenic composition comprising a canine coronavirus spike protein administered to dogs against canine coronavirus infection (see abstract, column 6, column 7 lines1-35).

It would have been prima facie obvious at the time the invention was made to inactivate y the whole cell Mycoplasma compositions of Mackenzie et al. in the manner taught by Hymas et al in order to take advantage of the increased safety associated with the use of an inactivated pathogen.

Furthermore given that cited antigens and combination vaccines are well known in the art leading to predictable results, it would be obvious to use cited antigens in an immunogenic composition disclosed in Mackenzie et al and Brown et al to create a combination vaccine with cited antigens, thus, it remains obvious to combine them (cited antigens and combination vaccines), even without an express statement of motivation. KSR forcloses the argument that a specific teaching, suggestion, or motivation is required to support a finding an obviousness. See the recent Board Decision Ex parte Smith, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007 (citing KSR, 82 USPQ2d at 1396) available at (http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf).

8. Claims 1, 8-10, 12-14, 40-41, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackenzie et al EP 0415794A1, Hymas et al US Application No.

20020150593 US Publication Date October 17, 2002, and Acree et al US Patent No. 4,824,785 Date January 28, 1986.

Mackenzie et al teach an immunogenic composition comprising whole cells from *M. cynos* (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55) further and a pharmaceutically acceptable carrier or adjuvant administered to animals such as a dog (see abstract, pg. 2 lines 34-54, pg. 3 lines 15-17, pg. 4 last paragraph). Mackenzie et al teach an immunogenic composition comprising *Chlamydia psittaci which is also defined as Chlamydophila psittaci* as evidenced by Saunders Comprehensive Veterinary Dictionary, 3 ed. 2007 (see attachment of definition) (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55, pg. 4 lines 1-20, and pg. 10 "Vaccines) administered to animals such as a dog.

Mackenzie et al does not teach an immunogenic composition, wherein the agent comprises inactivated or attenuated *M. cynos,* further comprising an agent capable of raising an immune response against a *Chlamydophila* in a dog, further comprising any one or more of: an agent capable of raising an immune response in a dog against canine respiratory coronavirus (CRCV); an agent capable of raising an immune response in a dog against canine parainfluenzavirus (CPIV); an agent capable of raising an immune response in a dog against canine adenovirus type 2 (CAV-2); an agent capable of raising an immune response in a dog against canine herpesvirus (CHV); wherein the agent capable of raising an immune response in a dog against CRCV comprises inactivated or attenuated CRCV, wherein the agent capable of raising an immune response in a dog against CPIV comprises inactivated or attenuated CPIV, wherein the agent capable of raising an immune response in a dog against CAV-2 comprises inactivated or attenuated CAV-2, wherein the agent capable of raising an immune response in a dog against CHV comprises inactivated or attenuated CHV. Furthermore Mackenzie et al does not teach an immunogenic composition comprising: (b) an agent capable of raising an immune response against M. cynos in a dog; and (d) an agent capable of raising an immune response against CRCV in a dog, further comprising any one or more of: (c) an agent capable of raising an immune response against a *Chlamydophila* in a dog; (e) an agent capable of raising an immune response in a dog against CPIV; (f) an agent capable of raising an immune response in a dog against CAV-2; (g) an agent capable of raising an immune response against CHV in a dog; and (h) an agent capable of raising an immune response in a dog against *B. bronchiseptica.*

Hymas et al teach an immunogenic composition comprising whole cell, inactivated bacterin from *Mycoplasma specie* (see 0012) (see 0028, column 5 0045, 0011). Hymas et al teach vaccines used to provide immunity against viral or bacterial infections comprise attenuated organisms or inactivated whole organisms in order to present antigens to the recipient's immune system sufficient to produce a protective immune response without giving the recipient the disease (see 0008).

Acree et al teach respiratory symptom of canine coronavirus disease is a slight nasal discharge (see column 2 lines 15-25) and further teach canine coronavirus found in the trachea of dogs after administering canine coronavirus intranasally (see example 2) which necessarily teach canine respiratory coronavirus (CRCV) as evidence to the contrary. Acree et al teach an immunogenic composition comprising an attenuated modified live canine coronavirus (see column 3 lines 20-67) to produce an immunological response in dogs (see column 5 lines 20-30). Acree et al teach any combination or singularly of additional attenuated modified live viruses or killed viruses such as Canine Parainfluenza virus, Canine Adenovirus II, and Canine Herpesvirus (see column 4 lines 1-15).

It would have been prima facie obvious at the time the invention was made to inactivate y the whole cell Mycoplasma compositions of Mackenzie et al. in the manner taught by Hymas et al in order to take advantage of the increased safety associated with the use of an inactivated pathogen.

Furthermore given that cited antigens and combination vaccines are well known in the art leading to predictable results, it would be obvious to use an immunogenic composition disclosed in Mackenzie et al and Acree et al to create a combination vaccine with cited antigens, thus, it remains obvious to combine them (cited antigens and combination vaccines), even without an express statement of motivation. KSR forcloses the argument that a specific teaching, suggestion, or motivation is required to support a finding an obviousness. See the recent Board Decision Ex parte Smith, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007 (citing KSR, 82 USPQ2d at 1396) available at (http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf).

9. Claims 1, 8-9, 15, 57, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackenzie et al EP 0415794A1, Hymas et al US Application No. 20020150593 US Publication Date October 17, 2002, and Jacobs et al US Patent No. 6,682,745 Date January 27, 2004 US Filing Date January 27, 2000.

Mackenzie et al teach an immunogenic composition comprising whole cells from *M. cynos* (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55) further and a pharmaceutically acceptable carrier or adjuvant administered to animals such as a dog (see abstract, pg. 2 lines 34-54, pg. 3 lines 15-17, pg. 4 last paragraph). Mackenzie et al teach an immunogenic composition comprising *Chlamydia psittaci which is also defined as Chlamydophila psittaci* as evidenced by Saunders Comprehensive Veterinary Dictionary, 3 ed. 2007 (see attachment of definition) (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55, pg. 4 lines 1-20, and pg. 10 "Vaccines) administered to animals such as a dog.

Mackenzie et al does not teach an immunogenic composition, wherein the agent comprises an inactivated or attenuated *M. cynos,* further comprising an agent capable of raising an immune response against a *Chlamydophila* in a dog, further comprising an agent capable of raising an immune response in a dog against *B. bronchiseptica*, wherein the agent capable of raising an immune response in a dog against *B. bronchiseptica* comprising inactivated or attenuated *B. bronchiseptica.*

Hymas et al teach an immunogenic composition comprising whole cell, inactivated bacterin from *Mycoplasma specie* (see 0012) (see 0028, column 5 0045, 0011). Hymas et al teach vaccines used to provide immunity against viral or bacterial infections comprise attenuated organisms or inactivated whole organisms in order to present antigens to the recipient's immune system sufficient to produce a protective immune response without giving the recipient the disease (see 0008).

Jacobs et al teach an immunogenic composition comprising live attenuated bacteria from *B. bronchiseptica*, an immunogenic composition comprising live attenuated bacteria from *S. zooepidemicus*, which are pathogenic for dogs (see column 4 lines 30-40).

It would have been prima facie obvious at the time the invention was made to inactivate y the whole cell Mycoplasma compositions of Mackenzie et al. in the manner taught by Hymas et

al in order to take advantage of the increased safety associated with the use of an inactivated pathogen.

Furthermore given that cited antigens and combination vaccines are well known in the art leading to predictable results, it would be obvious to use an immunogenic composition disclosed in Mackenzie et al and Jacobs et al to create a combination vaccine with cited antigens, thus, it remains obvious to combine them (cited antigens and combination vaccines), even without an express statement of motivation. KSR forcloses the argument that a specific teaching, suggestion, or motivation is required to support a finding an obviousness. See the recent Board Decision Ex parte Smith, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007 (citing KSR, 82 USPQ2d at 1396) available at (http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf).

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Mackenzie et al teach an immunogenic composition comprising whole cells from *M. cynos* (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55) further and a pharmaceutically acceptable carrier or adjuvant administered to animals such as a dog (see abstract, pg. 2 lines 34-54, pg. 3 lines 15-17, pg. 4 last paragraph). Mackenzie et al teach an immunogenic composition comprising *Chlamydia psittaci which is also defined as Chlamydophila psittaci* as evidenced by Saunders Comprehensive Veterinary Dictionary, 3 ed. 2007 (see attachment of definition) (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55, pg. 4 lines 1-20, and pg. 10 "Vaccines) administered to animals such as a dog.

Mackenzie et al does not teach an immunogenic composition, wherein the agent comprises inactivated or attenuated *M. cynos,* further comprising an agent capable of raising an immune response against a *Chlamydophila* in a dog, further comprising any one or more of: an agent capable of raising an immune response in a dog against canine respiratory coronavirus (CRCV); an agent capable of raising an immune response in a dog against canine

parainfluenzavirus (CPIV); an agent capable of raising an immune response in a dog against canine adenovirus type 2 (CAV-2); an agent capable of raising an immune response in a dog against canine herpesvirus (CHV); and an agent capable of raising an immune response in a dog against *B. bronchiseptica*, wherein the agent capable of raising an immune response in a dog against CRCV comprises inactivated or attenuated CRCV, wherein the agent capable of raising an immune response in a dog against CPIV comprises inactivated or attenuated CPIV, wherein the agent capable of raising an immune response in a dog against CAV-2 comprises inactivated or attenuated CAV-2, wherein the agent capable of raising an immune response in a dog against CHV comprises inactivated or attenuated CHV, wherein the agent capable of raising an immune response in a dog against *B. bronchiseptica* comprises inactivated or attenuated *B. bronchiseptica*, further comprising an agent capable of raising an immune response against a *Chlamydophila* in a dog. Furthermore Mackenzie et al does not teach an immunogenic composition comprising: (b) an agent capable of raising an immune response against M. cynos in a dog; and (d) an agent capable of raising an immune response against CRCV in a dog, further comprising any one or more of: (c) an agent capable of raising an immune response against a *Chlamydophila* in a dog; (e) an agent capable of raising an immune response in a dog against CPIV; (f) an agent capable of raising an immune response in a dog against CAV-2; (g) an agent capable of raising an immune response against CHV in a dog; and (h) an agent capable of raising an immune response in a dog against *B. bronchiseptica,* further comprising an agent capable of raising an immune response against *S. zooepidemicus* in a dog.

Hymas et al teach an immunogenic composition comprising whole cell, inactivated bacterin from *Mycoplasma specie* (see 0012) (see 0028, column 5 0045, 0011). Hymas et al teach vaccines used to provide immunity against viral or bacterial infections comprise attenuated organisms or inactivated whole organisms in order to present antigens to the recipient's immune system sufficient to produce a protective immune response without giving the recipient the disease (see 0008).

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immunogenic composition comprising an attenuated modified live canine coronavirus (see column 3 lines 20-67) to produce an immunological response in dogs (see column 5 lines 20-30). Acree et al teach any combination or singularly of additional attenuated modified live viruses or killed viruses such as Canine Parainfluenza virus, Canine Adenovirus II, and Canine Herpesvirus (see column 4 lines 1-15).

Jacobs et al teach an immunogenic composition comprising live attenuated bacteria from *B. bronchiseptica*, an immunogenic composition comprising live attenuated bacteria from *S. zooepidemicus*, which are pathogenic for dogs (see column 4 lines 30-40).

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Furthermore given that cited antigens and combination vaccines are well known in the art leading to predictable results, it would be obvious to use an immunogenic composition disclosed in Mackenzie et al and Acree et al to create a combination vaccine with cited antigens, thus, it remains obvious to combine them (cited antigens and combination vaccines), even without an express statement of motivation. KSR forcloses the argument that a specific teaching, suggestion, or motivation is required to support a finding an obviousness. See the recent Board Decision Ex parte Smith, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007 (citing KSR, 82 USPQ2d at 1396) available at (http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf).

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Mackenzie et al teach an immunogenic composition comprising whole cells from *M. cynos* (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55) further and a pharmaceutically acceptable carrier or adjuvant administered to animals such as a dog (see abstract, pg. 2 lines 34-

54, pg. 3 lines 15-17, pg. 4 last paragraph). Mackenzie et al teach an immunogenic composition comprising *Chlamydia psittaci which is also defined as Chlamydophila psittaci* as evidenced by Saunders Comprehensive Veterinary Dictionary, 3 ed. 2007 (see attachment of definition) (see claims 1-2 and pg. 2 lines 40-50 pg. 3 lines 51-55, pg. 4 lines 1-20, and pg. 10 "Vaccines) administered to animals such as a dog.

Mackenzie et al does not teach an immunogenic composition, wherein the agent comprises inactivated or attenuated *M. cynos*, further comprising an agent capable of raising an immune response against a *Chlamydophila* in a dog, further comprising any one or more of: an agent capable of raising an immune response in a dog against canine parainfluenzavirus (CPIV); an agent capable of raising an immune response in a dog against canine adenovirus type 2 (CAV-2); and an agent capable of raising an immune response in a dog against *B. bronchiseptica*, wherein the agent capable of raising an immune response in a dog against CRCV comprises a Spike protein or a hemagglutinin-esterase (HE) protein of CRCV, or an immunogenic portion of the Spike or HE protein, wherein the agent capable of raising an immune response in a dog against *B. bronchiseptica* comprises inactivated or attenuated *B. bronchiseptica*. Furthermore Mackenzie et al does not teach an immunogenic composition comprising: (b) an agent capable of raising an immune response against M. cynos in a dog; and (d) an agent capable of raising an immune response against CRCV in a dog, further comprising any one or more of: (c) an agent capable of raising an immune response against a *Chlamydophila* in a dog; (e) an agent capable of raising an immune response in a dog against CPIV; (f) an agent capable of raising an immune response in a dog against CAV-2; (g) an agent capable of raising an immune response against CHV in a dog; and (h) an agent capable of raising an immune response in a dog against *B. bronchiseptica,* further comprising an agent capable of raising an immune response against *S. zooepidemicus* in a dog.

Hymas et al teach an immunogenic composition comprising whole cell, inactivated bacterin from *Mycoplasma specie* (see 0012) (see 0028, column 5 0045, 0011). Hymas et al teach vaccines used to provide immunity against viral or bacterial infections comprise attenuated organisms or inactivated whole organisms in order to present antigens to the recipient's immune system sufficient to produce a protective immune response without giving the recipient the disease (see 0008).

Brown et al teach a canine coronavirus which causes respiratory diseases in dogs and respiratory symptoms of the canine coronavirus include nasal and ocular discharge (see column 1) which necessarily teaches canine respiratory coronavirus (CRCV) as evidence to the contrary. Brown et al teach an immunogenic composition comprising a canine coronavirus spike protein administered to dogs against canine coronavirus infection (see abstract, column 6, column 7 lines1-35).

Jacobs et al teach an immunogenic composition comprising live attenuated bacteria from *B. bronchiseptica*, an immunogenic composition comprising live attenuated bacteria from *S. zooepidemicus*, which are pathogenic for dogs (see column 4 lines 30-40).

Furthermore given that cited antigens and combination vaccines are well known in the art leading to predictable results, it would be obvious to use an immunogenic composition disclosed in Mackenzie et al, Brown et al, and Jacobs et al, to create a combination vaccine with cited antigens, thus, it remains obvious to combine them (cited antigens and combination vaccines), even without an express statement of motivation. KSR forcloses the argument that a specific teaching, suggestion, or motivation is required to support a finding an obviousness. See the recent Board Decision Ex parte Smith, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007 (citing KSR, 82 USPQ2d at 1396) available at (http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf).

Conclusion

12. No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nina A. Archie whose telephone number is 571-272-9938. The examiner can normally be reached on Monday-Friday 8:30-5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Robert Mondesi can be reached on 571-272-0956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nina A Archie

Examiner

GAU 1645

REM 3B31

/Robert A. Zeman/

for Nina Archie, Examiner of Art Unit 1645